North Coast
Amateur Radio Club
P.O. Box 30529
Cleveland, Ohio 44130

NCARC
145.290
MHz

NORTH COAST COMMUNICATOR

JANUARY - FEBRUARY 1986

A not for profit Ohio corporation organized to promote the proficiency of amateur radio communication thru related experimentation, education and dissemination of information, and maintain amateur radio communication as a public service, especially during emergencies.

President: Rick Wells, K8SCI 779-8999
Vice President: Bob Mills, K8TTZ 431-9492
Secretary: Steve Wolf, NO8M 777-1177
Treasurer: Glenn Christman, WD8OMW 661-3656

TRUSTEES
Dave Curry - KB8TT
Dick Dell - WD8ISB
Dirk Gastaldo - NO8N
Tim Hitesman - KA8VIC
Tom Kopcak - N8ETP
Shirley Lantz - KA8Y
Mike Walker - K9SSL
Pauline Wells - KA8FOE
Ed Zorn - KD8ZK

HAPPY
NEW YEAR

BOARD MEETING - SUNDAY, JANUARY 26, 1986 3 PM.
All officers/trustees, guest welcome. ** NEW LOCATION **
DENNY'S Restaurant, West 150th St. just South of I-71.

REGULAR MEETING - THURSDAY, FEBRUARY 6, 7:30 PM.
All members and guest welcome. Location: N. Olmsted Br. of the Cuyahoga County library, (See enclosed map). The program at this meeting will be a discussion of Packet Radio with a "live" demonstration presented by: Tom Kryza (KB8CI)

REGULAR MEETING NOTICE - THURSDAY, MARCH 6, 7:30 PM.

All members and guest welcome. Location: N. Olmsted Branch of the Cuyahoga County library, (See enclosed map). The program at this meeting has not been confirmed as of yet, however we are hoping to have a presentation and overview of the ARRL.

NORTH COAST ARC IS NOW ARRL AFFILIATED

On December 14, 1985, the Board of Directors of the American Radio Relay League approved our clubs application. The temporary club affilation number of 9200 has been changed to a permanent number of 2047.

North Coast members who are not ARRL members but are planning to join the ARRL should include our 2047 club affilation number on the ARRL application form. ARRL application forms will be at the next North Coast meeting. New ARRL applications would be sent to the ARRL direct.

If you are currently an ARRL member, you may renew your ARRL membership through the North Coast ARC. Send your renewal to: North Coast ARC, PO BOX 30529, Cleveland, Ohio 44130. Include your check for $25.00 made out to the North Coast ARC. Glenn Christman (WD8OMW) our club treasurer will forward your renewal on to the ARRL.

NEW NORTH COAST MEMBERS

Please help in making a warm welcome to the following new North Coast members:

WL7AEC	Tom Tetzlaff	5341 Cornell Ave.	N. Ridgeville, OH 44039	1-327-6020	
KB8AK	Pat Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574	
WB8BPA	Don Hill	2005 Marlindale Rd.	Cleveland Hts., OH 44118	932-8050	
N8CAY	Diane Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574	
KA8CYD	Jennifer Lantz	5641 Dunham Rd.	Maple Hts., OH 44137	662-4307	
K8DBN	Bill Rieke	1440 E. Melrose	Westlake, OH 44145	333-6644	
N8FIL	Rich James	7620 Crestwood Ln.	Northfield Ctr, OH 44067	467-0493	UL
N8HAD	Skip Hockensmith	6229 Elmdale	Brookpark, OH 44142	267-9374	
N8HBW	Ron Sauer	23260 Cannon Rd.	Bedford Hts., OH 44146	439-1534	
AI8M	Dave Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574	
K8MGH	Lou Pierce	6344 Ridgeview Blvd.	N. Ridgeville, OH 44039	1-327-2206	
KA8PEF	Joe Liszeski	8233 Avon Belden Rd.	N. Ridgeville, OH 44039	1-327-7938	UL
KA8SLX	Chris Tetzlaff	5341 Cornell Ave.	N. Ridgeville, OH 44039	1-327-6020	
KA8THY	Edna Lorenz	P O Box 147	Clinton, OH 44216	1-882-3315	
AJ8Y	Dennis Chaney	27697 Bryandale	Westlake, OH 44145	871-4685	
KD8YM	Mike Willemin	331 Courtland St.	Elyria, OH 44035	1-324-4574	

MINUTES OF THE 11/24/85 EAP COMMITTEE de Steve Wolf, N08M, Secretary

The North Coast EAP Committee met on November 24, 1985. In attendance was Tim, KA8VIC, Dick, WD8ISB, Rick, K8SCI, Dirk, N08N, Glenn, WD8OMW, and Steve, N08M. The meeting began at 1710.

The purpose of the meeting was to begin work on a initial draft of the North Coast Amateur Radio Club Emergency Plan, as written by Tim. Tim wrote this draft from input received from previous committee meetings and material provided by the ARRL.

Steve, N08M, gave a presentation based on his experience with a recent couse on Emergency Preparedness put on by the Federal Emergency Managment Administration (FEMA) and the Ohio DSA. Steve distributed workbooks used in a home-study course put on by FEMA. Tim, KA8VIC, summarized the material which he has received from the ARRL and other amateur radio sources on emergency planning. ARRL structure and the ARES in Cuyahoga County was discussed. Rick, K8SCI, has been contacted by the State EC and dialog was opened to this person.

The initial draft of the plan was discussed at length.

Equipment needs to be used in the event of a disaster were discussed. It was determined that members would consider what gear they believe would be necessary and this subject would be considered during the December meeting.

The new draft will be prepared and ready for distribution to committee members at the December general meeting. Another meeting was set for December 15 at 1600 at KA8VIC's residence. A tentative agenda was determined. The meeting ended at 2000 hours.

MINUTES OF THE 12/15/85 EAP COMMITTEE de Steve Wolf, N08M, Secretary

The meeting was called to order at about 1815 hours. In attendance were K8SCI, Rick, N08N, Dirk, WD8ISB, Dick, Glenn, WD8OMW, Tim, KA8VIC and Steve, N08M.

The draft which was modified at the last EAP meeting was again modified, varied, altered, changed, shaped, formed and renewed.

This new form will appear in the next issue of the Communicator. A short status report will be given at the January meeting. At the February meeting, the plan will be discussed and a motion to approve and begin the implementation of the plan will be made.

The meeting came to a close at about 2027 hours.

NABER OPPOSES PRIVACY ACT - WESTLINK REPORT January 10, 1986 de WA6ITF

The National Association of Business and Educational Radio (NABER) has voiced its public opposition to a portion of the proposed Electronic Communications Privacy Act of 1985. Writing in the December, 1985 issue of Personal Communications Technology magazine, NABER President Jay Kitchen noted that it was NABER's view that the proposed act would "inadvertently include into its gambit otherwise normal and acceptable operational activities conducted on private land mobile radio systems". Kitchen says the structure of the PLMRS is such that it literally requires all service users of shared channels to monitor all on - channel radio operations to determine when a given channel can be used to initiate communications without interfering with other users. He also notes that base station operators monitor communications for control purposes and to insure efficient use of the spectrum.

The NABER President concludes that their main concern stems from the bill's substitution of the words "communications common carrier" with "a provider of electronic communications services" as the target groups of the legislation. He feels that this would not only place unreasonable restrictions on PLMRS operations, but could change the very nature of the service itself. Based on 1984 figures, there are approximately 950,000 authorized stations operating nearly 8 million radio sets in the Private Land Mobile Radio Service. Thus, NABER joins a growing list of groups including private, amateur, government and business radio users who for various reasons oppose the E.C.P.A. in part or in whole.

MINUTES OF THE TRUSTEE'S MEETING -- December 1, 1985 de Steve Wolf, NO8M, Secretary.

The meeting was called to order by Rick at 1610 hours. In attendance were KA8FOE, Pauline, NO8N, Dirk, KA8Y, Shirley, K8SCI, Rick, WD8ISB, Dick, K8TTZ, Bob, WD8OMW, Glenn and NO8M, Steve.

The agenda for the upcoming general meeting was discussed.

Dirk went over the changes which have been made to the by-laws and published in the Communicater. Dirk moved that the trustees support the By-Laws as published and the motion passed.

Liability insurance was investigated by Dirk. He contacted three companies and requested a written estimate from each. All three had verbally indicated a price in the area of $150.00 per year for $500,000.00 coverage. Only one company, GFN, responded, even after phone calls to the other companies. On a motion from Dirk, the trustees approved support of obtaining insurance. Shirley held reservations as to whether the insurance would cover the individual members as well as the club. Discussion followed. On a motion from WD8ISB, the trustees moved to reconsider the previous motion. Dirk will attempt to determine the insurance companies liability to the individual and if the company is liable (if they must cover individual actions as well as club actions) a motion will be made to purchase the insurance at the next general meeting.

Glenn gave the treasurers report. The methods of accounting are in the process of being revised. It appears that we can afford the insurance. Knowledge of where the club stands will be better known after the new accounting methods have been implemented. Rick reported that the North Olmsted Hockey Club made a donation of $100.00.

A discussion about trustee philosophy, the way the club does business and the club's future followed.

The issue of repeater ownership was brought up by Dirk. It was agreed that ownership of club equipment was preferred over private ownership. Dirk made a motion to establish an equipment fund in the club budget and make it known to the members. Discussion followed. On a roll-call vote, the issue failed. Voting for the measure were Dirk, Pauline and Glenn. Voting against was Steve. Bob and Shirley abstained. The motion did not pass.

An overview of the EAP Committee meeting was presented.

W1BKZ, Pete, and K8ATQ, Rol, have resigned as trustees due to their working schedules. Replacements were discussed. Dirk made a motion that the vacant positions be filled which passed.

On a motion from Dirk, it was resolved that the fiscal year for the club will end in the month of June.

Dirk reported that the tax-exempt application was almost complete and will soon be submitted.

Rick recommended that the club subscribe to the W5YI and Westlink reports. Costs were considered and this suggestion will be held until the next trustee's meeting when the budget will be ready.

ARRL affiliation was discussed and it was determined that phone calls will be made by the trustees in an attempt to obtain ARRL membership data for affiliation.

Steve reported that he has been unable to drum up more than five club coat orders. An announcment at the meeting will be made and if there is not enough interest, the purchase of coats will be forgotten for a time.

The meeting adjourned at 1855.

BOY SCOUT EXPO - GREAT NORTHERN MALL - Saturday, February 8, 1986

Lin Shaw (WD8SDP) can still use some additional help to demonstrate amateur radio from inside the Great Northern Mall. If you can assist or provide coax or equipment, call Lin at: 235-3912.

MINUTES OF THE REGULAR MEETING -- December 6, 1985 de Steve Wolf, N08M, Secretary

CALL TO ORDER -- The meeting was called to order at 7:20 p.m. by the President, Rick, K8SCI.

TRUSTEES -- Rick, K8SCI advised that Rol, K8ATQ, and Pete, W1BKZ, have resigned their trustee postions due to their working schedules. Tim, KA8VIC has been appointed to fill the three year vacancy. The second postion, a two year term, has not been filled.

ROLL -- The secretary called the roll. The following trustees were present: Rick, K8SCI, Bob, K8TTZ, Glenn, WD8OMW, Steve, N08M, Tom, N8ETP, Shirley, KA8Y, Pauline, KA8FOE, Dirk, N08N and Tim, KA8VIC. There were 27 other members and five guests present.

TREASURER/MINUTES -- The treasurer's report was given and accepted as read. The minutes from the last meeting were accepted as they appeared in the Communicator.

MINUTES -- On the motion from Dirk, N08N, the bylaws, as printed in the November/December Communicator, were accepted. There were 30 persons voting to accept.

LIABILITY INSURANCE -- The purchase of liability insurance was discussed. On the motion of Chuck, K8RSH, it was resolved that the club purchase $500,000.00 or greater liability insurance coverage, from GFN Insurance, at a cost not to exceed $175.00 per year.

ARRL AFFILIATION -- Dirk reported on ARRL Affiliation. The application has been made and the club assigned a temporary identification number: 9200. In the event of a new or renewal application to the ARRL, each member should place this number on the application. The club will realize $5.00 for each new member and $2.00 for each renewal.

INCORPORAION -- Rick, K8SCI gave a summary of the Incorporation of the club which has now been completed.

VE EXAMINATIONS -- Shirley, KA8Y, reported that a club VE test has been scheduled for February 22, 1986 in Maple Heights.

TAX EXEMPT STATUS -- Dirk, N08N, gave an update of the future filing for tax-exempt status. Preparation of the papers is proceeding.

EAP COMMITTEE -- Steve, N08M, gave an update on the last EAP Committee meeting. A draft has been prepared and input solicited. The next EAP Committee meeting has been set for December 15, 1985.

VOLUNTEERS -- Volunteers were requested for club functions. Dirk, N08N, volunteered as a club education coordinator. Steve, N8GNJ, volunteered as an assistant editor for the Communicator. Fred, WB8UDA, volunteered as awards and recognition coordinator.

DUES -- On a motion from Dirk, N08N, it was resolved that the membership dues would be set at $12.00 for a regular member and $1.00 for a family member.

ANNOUNCEMENTS -- Rick, K8SCI, announced the dates for the next six meetings, information about the Christmas banquet and changes in the 5.29 repeater.

144.290 MSO -- Steve, WD8INO, reported that a 144.290 SSB MSO is now operating. All are invited to participate. The purpose of the MSO is to foster interest in VHF, UHF and SHF.

CODE PRACTICE -- Bob, N8FKT, reported that code practice is no longer available on the 146.850 repeater. He also stated that a request has been made for word-group practice rather than random letter transmissions.

MAPS -- Fred, WB8UDA, made free Ohio maps available to anyone in attendance.

BOY SCOUT EXPO -- Volunteers were requested to assist Linn, WD8SDP with the Boy Scout Expo to be held in February at the Great Northern Mall. Lin reports a special need for lenths of coax greater than 250 feet.

TCN -- Rick announced the upcoming teleconference net on 146.76 at 9:00 p.m. on ACSSB was announced.

TEN METER REPEATER -- Dave, N8ETY, gave an overview of the ten meter repeater.

FOXHUNT -- Rick, K8SCI, announced the the next foxhunt, December 14, 1985 at 7:00 p.m.

PRIZES -- The door prizes were awarded to N8ETQ, N8FKT, and KA8WRZ. The 50-50 raffle was awarded to Jim, KB8ZA.

ADJOURNMENT -- The meeting was adjorned at 8:15. Bob, N8FKT, and Mike, KA8OEI, presented the program, an overview of Red Cross Disaster Assistance Activities.

MINUTES OF THE REGULAR MEETING -- January 2, 1986 de Steve Wolf, NO8M, Secretary

- CALL TO ORDER: The meeting was called to order at 7:30 p.m. by Rick, K8SCI.
- ROLL: The secretary called the roll. There were 39 persons in attendance: 10 trustees, 22 members and 7 guests.
- MINUTES: Copies of the minutes from the December 6, 1985 meeting were available for inspection. These minutes were approved as submitted.
- TREASURER'S REPORT: Glenn, WD8OMW, reported on the treasury and his report was approved.
- COMMITTEE REPORTS:
  - EAP: Tim, KA8VIC -- Tim gave an overview of the EAP meetings and presented copies of the plan which had been written. It is felt that the purpose of this committee has been met and the club should proceed with implementation of the plan.
  - TAX-EXEMPT: Dirk, NO8N -- Dirk reported that the tax-exempt application had been filed on December 20, 1985. A decision may be received by early March. Dirk feels that our application will result in a ruling in favor of tax-exempt status.
  - VE EXAM: Rick, K8SCI for Shirley KA8Y -- Rick reported that preparations were continuing on the February 22 VE Exam in Maple Heights. Announcement fliers for the exam were available.
  - FIELD DAY: Rick, K8SCI for Shirley, KA8Y -- Rick reported a continuing need for equipment commitments for field day.
  - ARRL AFFILIATION: Dirk, NO8N -- Dirk reported that the ARRL's Executive Committee has approved the Club's affiliation. Our number is 2047 and should be included on applications for new or renewal membership. Renewals should be sent to the Club with the check made out to the North Coast Amateur Radio Club. The club will realize $5.00 from a new member and $2.00 from a renewal. Applications should be available from the club in the near future.
  - INSURANCE: Dirk, NO8N -- Dirk reported that the liability package available from the ARRL may be worthwhile investigating. Reconsideration of the motion to purchase insurance was requested. A motion was made by Steve, N8GNJ, to reconsider the motion and it was voted upon and passed. On the advice of Charlie, N8BO, the president declared this action invalid. It was resolved under a second motion, also made by Steve, N8GNJ, to reconsider the resolution of the meeting of December 6, 1985, concerning the purchase of liability insurance, to allow the trustees to choose the better of the ARRL and GFN liability insurance policies and to allow an expenditure of up to $225.00.
- ACTIVITIES:
  - CONTEST: Rick, K8SCI for John, WD8IQJ -- Rick reported that the club's affiliation has opened up a club contest opportunity. Club members who participate individually in contests may also submit their scores for inclusion in an affiliated club contest. It was unknown if ARRL membership is needed for a member to participate in this manner.
- UNFINISHED BUSINESS: None.
- NEW BUSINESS:
  - ARRL ASSISTANT DIRECTOR: Larry, KA8WRZ, volunteered to investigate the possibility of being an ARRL Assistant Director and to investigate the benefits of that to the club.
  - BULLETINS: Bob, K8TTZ, volunteered to obtain the ARRL bulletins, read the ones of importance on the nets and provide a hard copy for the Communicator where necessary.
  - FINANCIAL COMMITTEE: The need for a financial/ways and means/budget type of committee was discussed. It was felt by many that the committee would be a needed function and, in working with the Technical Committee, give the club a sense of direction. Volunteers were requested to contact Rick, K8SCI. There were no volunteers to chair this committee.
  - TECHNICAL COMMITTEE: Jim, W8PEV, has volunteered to chair a Technical Committee and is seeking members.
  - PUBLIC RELATIONS COORDINATOR: Steve, NO8M, has volunteered to act as Public Relations Coordinator. Steve reported that direction for this position will be sought from the trustees.
- ANNOUNCEMENTS:
  - PUBLIC SERVICE: Rick, K8SCI for Lin, WD8SDP -- Rick requested assistance in helping Lin, WD8SDP, in the Boy Scout Expo to be held on February 8 at the Great Northern Mall. There are still unmet equipment needs.
  - 911 EMERGENCY: Charlie, N8BO -- Charlie gave an update on the Cuyahoga County 911 Emergency Call System.
  - AMATEUR RADIO CLASSES: Paul, N8CKV -- Paul reported that the North Ridgeville Repeater Association will be sponsoring classes. Contact K8JK or give a call on 145.23 for details.
- ADJOURNMENT: The meeting was adjourned at 2032
- PRIZES: 50/50: Steve, WD8INO -- Door prizes: Steve, NO8M and Bill, K8DBN.
- PROGRAM: The SAREX video tape, provided by Art, K8BVI, was shown.

FOX HUNT REPORT - DECEMBER 14, 1985 - de Ron, N8FCX

This month's fox (Ron N8FCX), was standing in for Frank (KA8BJA) because he wasn't able to make it. I know he wanted to be the fox this month so at the last minute I had to find a real crafty spot in a hurry so I drove about a half hour around the area. I found a spot in Huntington Park in Bay Village. I was parked next to the changing rooms and bath houses. The hunt started at 7:10 PM and ended at 8:49 PM (1 Hr 39 Mins).

Steve (NO8M) and XYL Mary (Gimpy) came in at the foxes den in 27 mins being first. Then Rick (K8SCI) and Pauline (KA8FOE) came in second in 43 mins after driving completely around me for about 5 minutes because of plastic he had on his passenger window. Then in 68 minutes coming in third was the combination of John (K8RZP), Larry (KA8WRZ) and Ray (WD8MHL) and last but not least was Dirk (NO8N) and Fred (WB8UDA) who came in at 99 mins.

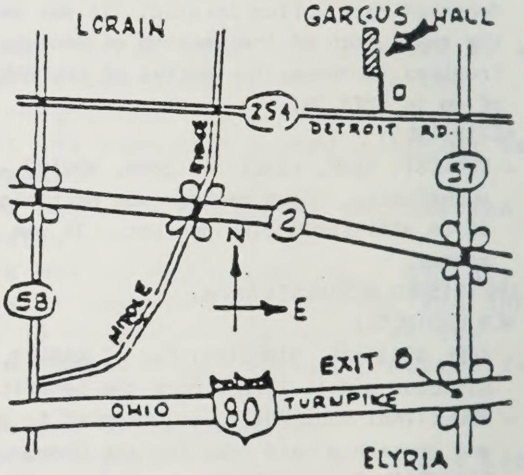
Afterwards everybody met at Frankies for food and eyeball QSO's. Come and join us in the fun.

FOX HUNT REPORT - JANUARY 11, 1986 - de Steve, NO8M

Well, K8SCI (Rick) won again with a time of 27 minutes. Berea has a maze of twisting, short and dead-end streets around the Lindberg area. K8RZP (John) with N8ETY (Dave) came in second. N8FCX (Ron) with KA8BJA (Frank) were going to pass the street that I was on. They saw my car and hit the binders. KB8WC (Jack) and his son were right behind FCX. Had he rammed FCX out of the way he would of been third instead of fourth. KC8QN (Ron) with WB8PHI (Larry) and a friend (Bill) brought the hunt to a close. NO8N (Dirk), Maryann (his XYL) and Mary (my XYL) suffered equipment failure and were forced out of the hunt.

NOARS WINTERFEST - FEBRUARY 2, 1986

The first Hamfest activity in this area is almost here. The NOARS Winterfest will be held Sunday February 2, 1986 at Gargus Hall, Lorain, Ohio. Doors open at 8 AM with the Main prize drawing at 3 PM. Admission is $2.50 at the door, and $2.00 in advance. Write to Winterfest, P.O. Box 354, Lorain, Ohio 44052 for advanced tickets. Tables assigned on a first come first serve basis. 8 foot table is $7.00 each. Mobile check in and directions on the 146.10/70 repeater. FCC exams, contact Dave (AI8M) for further information 324-4574 (Elyria), or Dave can often be found on the 145.15, 145.23 or 145.29 repeaters.



32ND ANNUAL ELECTRONICS EQUIPMENT AUCTION & HAMFEST - FEBRUARY 23 - Cuyahoga Falls

Sponsored by the Cuyahoga Falls ARC, this will be held Sunday, February 23 from 8 AM to 3 PM at a new location in Cuyahoga Falls, Ohio. Tallmadge High School, 1 mile east of Tallmadge Circle on East Ave., and 2.3 miles west of exit 31 on I-76 offramp. Admission is $3.00 in advance or $4.00 at the door. Sellers may bring their own tables, free flea market space. 8 foot tables $5.00 in advance, half tables available. Order two weeks in advance for guaranteed table. We must order tables two weeks prior. Talk-in on 147.87/27. SASE for tables, tickets, and info to: Bill Sovinsky, K8JSL, 2305 24th St., Cuyahoga Falls, Ohio 44223. Phone: 923-3830 (Cuyahoga Falls).

LAKE COUNTY HAMFEST - MARCH 23, 1986

The Lake County Amateur Radio Association presents the 8th Annual Lake County Hamfest on Sunday, March 23, 1986 from 8 AM to 4 PM at the Madison High School. Main drawing is at 3:05 PM (Winner need not be present). Tickets are $3.00 in advance and $4.00 at the Door.

AUTOPATCH DEACCESS CODE ON THE NCARC 145.290 MHz REPEATER HAS CHANGED

Due to the fact that someone has been maliciously cutting down some autopatch calls, the deaccess code (TO DISABLE THE PATCH AT THE END OF A CALL) has been changed. If you do not know what the new code is, please contact any of the officers or trustees for the information.

INTERFERENCE - 145.290 AND OTHER LOCAL REPEATERS

Unfortunately, an individual (I use the term loosely) has been causing some deliberate jamming of sorts on our repeater, as well as some of the other local area repeaters. The interference has been: 1) blank carrier transmitted strong engough to cover normal users, 2) blank carrier transmitted during autopatch dialing disrupting number dialed, 3) carrier with touch-tones transmitted while normal user dialing to cause wrong numbers, 4) steady kerchunking, and the cutting down of the autopatch during normal usage.

145.290 now has an anti-kerchunking device which means that if the repeater is not on the air (in standby), it takes a full one-half second of carrier before the repeater will come up on the air. This has cut down much of the kerchunking, and has eliminated some of the out-of-town stations who are sometimes near the repeaters receiver squelch threshold.

The repeaters receiver pre-amp control has now been changed so that the pre-amp will now always be on, however, the receivers squelch will be tightened or restored using the same codes once used for pre-amp control. The higher pitch courtesy beep means that the squelch is in the tighter mode (the squelch will be in the tighter mode automatically during autopatches).

If you hear some interference on the repeater, DO NOT COMMENT REGARDING IT. If you have the ability to receive the input frequency of the repeater (144.690 MHz), switch to that frequency to see if you can hear the station causing the problem. If you are at your home QTH and have directional antennas, rotate the antenna 360 degrees to find out which direction the interfering signal is coming from. Write down the date, time, signal strength, direction or any other information you feel would be helpful and contact either Rick (K8SCI) 779-8999 or Steve (NO8M) 777-1177 as soon as possible via telephone (DO NOT GIVE REPORTS ON THE AIR). All reports are helpful but please be sure your information is accurate as possible. Even if you cannot detect a signal at all, that information could help verify other info. If you prefer, mail information you may have to: NCARC, PO BOX 30529, CLEVELAND, OH 44130.

NORTH COAST JACKETS

If you are interested in finding out more about jackets, please contact Steve (NO8M) for more information. Several individuals have expressed a desire for them, however, because of a minimum quantity requirement, an order has not been made as of yet with the new supplier. Steve (NO8M) can be reached on the 145.290 repeater, or via telephone at 777-1177.

FCC AFFIRMS DENIAL OF PETITION TO AUTHORIZE TECHNICIAN CLASS AMATEUR PRIVILEGES IN 160M BAND

The Commission has affirmed the Private Radio Bureau's denial of Shaler Hanish's petition for Technician class amateur privileges in the 160-meter amateur frequency band.

Hanisch had argued that present Technician class privileges normally permit voice contact only above 30 MHz, thus limiting Technician class amateur operators who live in isolated rural areas and small towns to telegraphy for long-distance communications.

The Commission agreed with the Chief, Private Radio Bureau, that granting the petition would diminish a licensee's incentive to upgrade. The FCC said the incentive licensing system provides the motivation for licenses upgrading, and enables amateur operators to compensate for various circumstances, including geographical location.

Action by the Commission December 12, 1985. FCC NEWS REPORT PR-13, December 13, 85

tnx to Mike Richardson, KA8OEI for the info...

WHAT IS PACKET RADIO de Pete Harmon, W1BKZ

A long time ago, in a place far away, amateur radio was conceived and executed as well as could be expected at the time. As the years and the technology progressed, it became painfully obvious that a reliable, fast method of text communication was needed. CW, voice, and even RTTY, although be they vastly improved since their inception, still fall prey to the evils of QRM, QRN, and whatever else the airwaves can muster up to impede successful communication.

Then, one day, the personal computer was brought on to the scene, and a clever group of HAMS decided to improve on communications from a reliablity point of view by extending the computers natural ability to communicate with another computer (or a peripheral device, like a printer) into the realm of ham radio. It works something like this:

W1BKZ writes a letter that he wants printed in the club News Letter. He does this with a program that is very much like a word processor. When he is done, instead of telling his computer to print the letter, his program sends a "print" command to another piece of hardware, which keys up his VHF transceiver, sends a short burst of data to a receiver, which, in turn kicks a program in an attached computer into operation. This program, if all is well, sends a short burst of data back to W1BKZ's transceiver, which is now in the listen mode. This burst tells W1BKZ's computer that all is in readiness, and to transmit the letter. With all the accuracy that is built into a computers data transfer methods, the transfer takes place, at about 1200 baud, or 40 times as fast as normal RTTY. Once received, the computer at the other end acknowledges the transmission, just like a printer would.

Sounds pretty good, so far, huh? Ah, but wait!! There is more....much more. Let's say that 'BKZ wants to send a copy of his letter to ARRL in Newington, also. No problem. As it turns out, every radio station that is set up for packet communication is also capable of repeating the received message. This concept is known as "Digi-peating", and every packet station is, by definition, a Digi-peater. Soooo, instead of addressing the letter to K8SCI, he now addresses it to W1AW and fires it away. Several digi-peaters later, it arrives unscathed at HQ. Pretty neat, huh?

Yep, you guessed it. There is more. First, since the packet information is sent in short bursts, there can be several complete communications taking place within a very short period of time (10-15 seconds). If your station is on line, it can be used as a Digi-peater while you are typing a letter, or getting some neat computer graphics ready to send. Then there is the gateway....VHF to HF communications link that can hook you up from Maine to Hawaii in one shot! You don't have to wait for the interminable one or two minutes that would exist on the VHF link.

Needless to say, there are the same features as are offered by the "twisted pair" bunch, like electronic mail, bulletin boards, and the like. Last, but not least, there is the good old-fashioned conversational mode (like quick RTTY).

Sound intriguing? You betcha!!! Sound expensive? Not as bad as it might seem. Needless to say, the posession of a decent personal computer is essential. You don't REALLY need a disk drive, but within a day or so, you will go buy one.....no kidding. Obviously, you will need a radio of some sort. Packet works anywhere......300 baud on HF, 1200 baud on VHF, "unlimited" on UHF.

If any of you are interested, please contact Pete Harmon, W1BKZ via phone 951-9360 or via Packet on 145.010.

AMATEUR CALL SIGNS AS OF JANUARY 1, 1986, EIGHTH DISTRICT de Dirk, NO8N

Extra: NQ8K   Advanced: KE8CN   General/Technician: N8HCI   Novice: KA8YOQ

One of the features that Azden claims is exclusive to Azden radios is Discriminator Centering, which is used when band scanning. This feature means that the rig won't stop scanning 5 KHz off frequency; the synthesizer looks at the voltage coming from the discrimiator circuit and when it is at maximum, that is when the scan stops.

As is becoming common for rigs of this size, the microphone and antenna connecters are mounted on the ends of cables exiting from the rear of the rig. The dealer I bought this rig from claims that (amazingly) this method reduces failures in the connections. I'm skeptical about that claim, but I've had no problems so far.

A REVERSE key allows you to listen on the repeaters input and transmit on the repeaters output frequencies. It doesn't latch and allow extended conversations in this mode. I think that a latching REVERSE switch would be a very desireable feature.

The front panel keyboard can double as a DTMF pad when transmitting, but the keys are small and it is easy to misdial with this pad. Another problem with this feature is that you have to hold the PTT switch down the entire time you're dialing. Other rigs have a 3-5 second hang time to allow you to release the PTT switch after you've dialed the first digit. Azden claims in the literature packed with the rig that a DTMF equipped microphone will be available as an option in the future.

Now for the bad news: this rig is an absolute BEAR to program correctly. Some of the programming sequences are so bizarre that you would NEVER figure them out without the manual. I keep a spare copy of the manual in my glove compartment just in case. The other bad news is that in places, the manual that I got with my rig was absolutely wrong on how to program certain functions. Hopefully, by now enough hams have complained about the manual to justify a corrected reprint.

A problem with programming the PL tones is that you need the manual to program the PL tones because Azden assigned each tone a number, and you program in the number that represents that frequency, and not the frequency itself. This is an annoying feature to me and I hope that Azden corrects this in future versions of this otherwise fine rig.

The unit uses a relay in the final stage, which in this day of solid state switches is rather archaic, but no problem to live with.

Some of the changes I would like to see Azden implement into this rig follow. I would hope that Azden would listen to these suggestions because most of them could easily be implemented by changing the internal programming of the radio instead of major hardware changes.

1. When the radio is in memory mode, pressing the UP or DOWN switches on the microphone should step the memory channel up or down instead of stepping the receive frequency up or down 5 KHz.

2. When the UP or DOWN switch on the microphone is held down more than 5 seconds, the radio should go into scan mode. If the radio is in memory mode, pressing the UP or DOWN buttons for more than 5 seconds should start scanning memory channels. If the radio is in direct mode, pressing the UP or DOWN buttons for more than 5 seconds should start band scanning between the frequencies programmed into channels 8 and 9.

3. A user should have a way of completely locking the keyboard so that pressing any key on the keyboard won't do anything. This could easily be accomplished by changing the programming so that pressing a unique combination of three keys at the same time (such as REV, PRI, AND MW).

The Azden PCS 5000 2m Tranceiver de Steve Stroh, N8GNJ

Basically I like the rig. It lets me do an awful lot of things that I couldn't do with any other rig.

First the good points:

1. It is small and fits well into my car (a Toyota station wagon). It is 2" high, 5 1/2" wide, and 7 1/4" long.
2. It has an excellent display; easy to read during the day and at night. Also, the keyboard is backlit.
3. It has a total of 20 memory channels. Each memory channel can contain the receive frequency, the transmit offset (+,- 600 KHz, or simplex), and transmitted CTCSS tone (the unit can synthesize all common CTCSS tones).
4. It has 25 watts of output, which I really appreciate. It also has a low power position, which on my rig puts out around 2 watts.
5. One of the nicest features that the rig has is that on the microphone there is a switch labelled CALL. When this switch is pressed, the rig immedietly QSYs to memory channel 0. This occurs no matter what mode the rig is currently in, even scanning. Then when you're done with your QSO on memory channel 0, when you hit the CALL button again, you are back to whatever frequency you were on before you pressed CALL the first time. However, if you were scanning when you pressed CALL, when you press CALL again, the rig will not resume scanning; you have to restart the scan manually.
6. One thing that CAP and MARS operators will like about this rig is its wideband coverage of 140-153 MHz (continous). Because of the way the memories are organized, it is possible to use any transmit split anywhere between 140 and 153 MHz (more on memory organization later).
7. The scanning feature has the usual feature of being able to lock out any unwanted channel. Since there are a total of 20 channels, I program in repeater frequencies in Northwest Ohio, (which I travel to on a regular basis) and then lock out those frequencies when I'm in the Cleveland area. The scanning function can be programmed to stay on a busy channel as long as it is active or resume scanning after pausing 5 seconds or so. (To change between these two modes is one of the more bizarre programming sequences in the entire manual.) A priority channel is included; if there is activity on channel 0 and you are listening on another channel, the rig will beep to indicate activity on channel 0. The rig will also do band scanning between any frequency programmed into memory channels 8 and 9, in either bank. This comes in handy when you want to scan two different band segments. You could program one band segment into channels 8 and 9 in bank A and program a completely different band segment into channels 8 and 9 in bank B.

The memory channel scheme is nice. The twenty memory channels are organized into two banks of ten channels. You can access the channels in one of four ways: 1. use the channels in bank A only, 2. use the channels in bank B only, 3. use the channels in both banks A and B, and 4. use the channels in bank A as the receive frequency and the corresponding channel in bank B as the transmit frequency. This type of operation is ideal for CAP and MARS operation.

One feature that I can't think of an immediate use for is that the steps the frequencies are stepped in is fully adjustable from a mininum of 5 KHz to 50 KHz. This is done in the same way the PL tone is programmed: using a chart in the manual.

The + and - offsets are fully adjustable, apparently, but the manual is extremely unclear about how to change this.

A feature that I find uselful is that upon turning on the rig, the rig comes up on the channel 0 of whichever bank you are in at the time. If you press the CALL button on the microphone, the rig will QSY to the last frequency that was used.

NORTH COAST AMATEUR RADIO CLUB EMERGENCY PLAN - DRAFT DECEMBER 22, 1985

INDEX - SECTION	TITLE
1	Introduction
2	Purposes
3	Plan distribution and Maintenence
4	Limitations
5	Organizational Structure
6	Training
7	Activation
8	Mobilization
9	Frequencies

APPENDICES	
A	Plan Distribution
B	Activation Contact Personnel
C	Notification Tree
D	Frequencies
E	Definitions

SUPPLEMENT -
Information for Amateurs

1. INTRODUCTION

1.1 The North Coast Amateur Radio Emergency Service (NCARES) is a public service of the North Coast Amateur Radio Club (NCARC). NCARES is comprised of FCC-licensed Amateur Radio operators who have voluntarily registered their capabilities and equipment to provide county-wide emergency communications within Cuyahoga County, Ohio.

1.2 Under Federal regulations, amateur radio public service communications are furnished without compensation of any kind.

2. PURPOSES

2.1 NCARES may supply communications services where no established links exist or supplement existing systems if they are overloaded or disabled. Such services may include:

2.1.1 Communications between Cuyahoga County Division of Emergency Assistance and Planning (EAP), formerly the Disaster Services Agency, and other government agencies.

2.1.2 Emergency communications between county officials and other officials.

2.1.3 Intercommunications among county, private and public services organizations.

2.1.4 Additional public service communications.

2.1.5 Health and welfare communications.

3. PLAN DISTRIBUTION AND MAINTENANCE

3.1 Agencies that may wish to utilize NCARES will receive copies of this plan to ensure their understanding of it. This plan will be reviewed at least annually and updated for distribution to the agencies listed in Appendix A.

4. LIMITATIONS

4.1 The information in this plan is to be used as a guide. It is not the intent of this plan to limit the actions of an operator who is on site and best able to assess the prevailing conditions.

4.2 NCARES is organized to provide communications services only. Amateur radio operators on NCARES duty are not expected to serve any other function.

4.3 The authenticity of all messages is the sole responsibility of the originating authority. The validity of such messages shall be determined by the originating authority.

4.4 Although a radio operator may report conditions as observed, such observations are considered to be those of a layperson and evaluated in that context.

5. ORGANIZATIONAL STRUCTURE

5.1 The officers, trustees and committee members of NCARC provide the executive and administrative support for NCARES actvities as outlined in this emergency plan.

5.2 The NCARES committee of NCARC is responsible to the membership of the club for the purpose of developing, administering and executing the emergency communications activities defined within this plan. The NCARES committee will designate a North Coast Emergency Coordinator (NCEC).

5.3 The NCEC will:

5.3.1 Coordinate operations within NCARES.

5.3.2 Coordinate NCARES activities with the Cuyahoga County EAP Manager.

5.3.3 Coordinate NCARES activities with the American Radio Relay League (ARRL) Section Emergency Coordinator.

5.3.4 Appoint a Training Manager, Assistant Emergency Coordinators, Emergency Net Managers, and such other officials related to the implementation of this plan as shall be approved by the NCARES committee.

5.4 Participation in the emergency/public service activities of NCARES is open to all licensed Amateur Radio operators. NCARC membership is not required of any individual to be registered with NCARES.

5.5 Individuals wishing to participate are encouraged to register themselves and their operating capabilities with the NCARES committee and will be invited to participate in NCARES training sessions.

5.6 Registered participants will be issued identification cards to facilitate recognition by disaster officials of the Cuyahoga County EAP and other participating agencies.

6. TRAINING

6.1 A minimum of one test of NCARES emergency preparedness will be conducted each calendar year.

6.2 News and information pertaining to NCARES activities will be presented during the Sunday night net conducted by NCARC on the 145.290 MHz repeater and will be published in the NCARC newsletter.

6.3 Club participation in public service communication activities will be coordinated with the NCARES committee to ensure that maximum emergency preparedness experience is achieved.

6.4 The Training Manager will schedule additional training opportunities in such matters as net control operations, emergency traffic handling and preparedness, that are consistent with the needs and desires of the club.

7. ACTIVATION

7.1 Activation may be requested by any agency or organization signatory to the plan by contacting any of the individuals listed in Appendix B.

7.2 The requesting official must define the communication need.

7.3 The NCEC, when notified of the need to activate, will design, organize and staff the communications network.

8. MOBILIZATION

8.1 The NCEC will initiate the notification tree in accordance with Appendix B, using the local telephone service, if available.

8.2 When necessary, mobilization announcements will be made on the 145.290 MHz repeater.

8.3 An emergency net will be opened on the 145.290 MHz repeater or on a simplex frequency designated by the NCEC when activating NCARES.

8.4 NCARES members will check into the net as soon as they are ready to participate and will then standby for instructions from the net control station.

8.5 Assignments will be made by the NCEC or the North Coast Assistant Emergency Coordinator (NCAEC) and will be communicated by net control.

9. FREQUENCIES

9.1 NCARES net operations will generally take place on the 145.290 MHz repeater or one of its designated simplex frequencies, but may be transferred to another area repeater when necessary with the permission of that repeater's control operator.

9.2 Simplex frequencies for on-site communication will be designated by the NCEC from those in Appendix D. All NCARES members should be equipped to operate on any of the designated frequencies if at all possible.

9.3 Additional frequencies listed in Appendix D will be utilized at the discretion of the NCEC.

9.4 NCARES will document, to the best of its ability, in Appendix D, the frequencies that are used by other amateur radio groups for support of other agencies (e.g., American Red Cross).

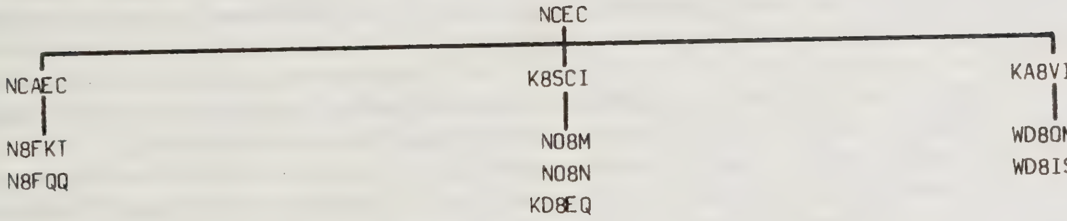
APPENDIX A: PLAN DISTRIBUTION

Organization	Liason
Cuyahoga County Division of Emergency Assistance and Planning	Patrick Mackin, Manager
American Red Cross - Cleveland Chapter	Bill Lentz, Director of Disaster Action Team
ARRL ARES Section Emergency Coordinator - Cuyahoga County	John Iannetta, WA8GMT
Ohio State Communications	Larry Solak WD8MPV, Coordinator
National Weather Service	
Army MARS	
Navy MARS	
Air Force MARS	
Civil Air Patrol	Frank Somrak

APPENDIX B: Activation Contact Personnel

	Name	Title	Phone	Call
Primary :		NCEC		
Secondary :		NCAEC		
Alternates:	Bob Bassett			N8FKT
	Glenn Christmann			WD8OMW
	Dick Dell			WD8ISB
	Dirk Gastaldo			NO8N
	Tim Hitesman			KA8VIC
	Dick Stuart			KD8EQ
	Rick Wells			K8SCI
	Steve Wolf			NO8M
	Tom Adams			N8FQQ

APPENDIX C: Notification Tree



APPENDIX D: Frequencies

Organization	Freq. MHz	Offset KHz	Purpose
NCARC (K8SCI)	145.290	-600	Directed Net
"	145.670	Simplex	Executive Channel
"	145.570	Simplex	Alternate Freq.
CARS	146.820	-600	Amer Red Cross, Cleveland Chapter
LEARA (WB8CQR)	146.760	-600	NWS - Cuyahoga Skywarn
"	146.880	-600	NWS - Cuyahoga Skywarn (Backup)
LCARA (N8CDN)	147.150	+600	NWS - Lorain Skywarn
			NWS - Summit Skywarn
			NWS - Lake Skywarn
			NWS - Geauga Skywarn
			NWS - Medina Skywarn
ARES	3.875		Admin/Coordination
Ohio SSB Net	3.9725		Traffic Net
Burning River	146.460		Traffic Net
M2MG (K8TV)	147.030	+600	Traffic Net
Civil Air Patrol	148.150		CAP Net

Two Meter Cleveland Area Repeaters

145.15	- North Royalton	K8KRG	NOARS
.23	- North Ridgeville	K8JK	NRRA
.29	- North Olmsted	K8SCI	NCARC
.47	- Vermillion	WD8DRZ	VARRA/LEARN
.49	- Chardon	WB8ATL	(RTTY)
146.61	- Hudson	K8BNI	
.70	- Elyria	K8KRG	NOARS
.73	- Warrensville Hts.	W8CZW	WRRA
.76	- Warrensville Hts.	WB8CQR	LEARA
.79	- Shaker Hts.	W8NRI	HERO
.82	- Brecksville	K8AJG	CARS
.85	- Cleveland	K8WPW	NORA

70 cm Cleveland Area Repeaters

443.025			
.05	- Vermillion	WD8DRZ	
.40	- Elyria	K8TV	
.50	-		
.60	- Lorain	WA8CAE	SCARS
444.05	- Vermillion	WD8DRZ	LEARN
.15	- Wickliffe	WA8PKB	LEARN
.20	-		
.35	- Parma	KB8NB	AB8Z
.35	- Brookpark	N8DUJ	BPDSA
.40	-		
.50	- Strongsville		

(Con't)

146.88	- Lakewood	WB8CQR	LEARA
.94	- Novelty	- -	NORA
147.03	- Medina	K8TV	M2MG
.06	- Chargin Falls	WA8HEB	CVA
.15	- Elyria	N8CDN	LCARA
.18	- Wakeman	AB8Z	SBRC
.21	- Painesville	K8BL	LCARA
.255	- Mentor	WB8PHI	
.36	- Broadview Hts.	W8COG	NODXA

444.55	-		
.65	- Painesville	WA8HAR	
.70	- Cleveland	WB8CQR	LEARA
.75	- Cleveland	WB8CDA	
.80	- Elyria	K8KRG	NOARS
.90	- Cleveland	K8DBL	WRRA
.95	- Warrensville	WB8APD	SMART
448.75	- Parma	NOCZV	

APPENDIX E: Definitions

AMATEUR RADIO SERVICE - The Amateur Radio Service is composed of radio operators who have volunteered their capabilities and equipment to provide supplemental communications in time of public need. Amateurs are licensed by the Federal Communications Commission after a written examination on their knowledge of telecommunications and technical skills in the operation of radio equipment.

EAP - The Cuyahoga County Division of Emergency Assistance and Planning.

NCAEC - The North Coast Assistant Emergency Coordinator. A member of the North Coast Amateur Radio Emergency Service appointed to assist the North Coast Emergency Coordinator.

NCARC - The North Coast Amateur Radio Club. A not for profit Ohio corporation organized to promote the proficiency of amateur radio communication thru related experimentation, education and dissemination of information, and maintain amateur radio communications as a public service, especially during emergencies.

NCARES - The North Coast Amateur Radio Emergency Service. A public service of the North Coast Amateur Radio Club comprised of FCC-licensed Amateur Radio operators who have voluntarily registered their capabilities and equipment to provide county-wide emergency communications within Cuyahoga County, Ohio.

NCEC - The North Coast Emergency Coordinator. An individual designated by the NCARES committee to coordinate operations within NCARES.

NET - A group of radio amateurs cooperating to provide communications.

NET CONTROL - An amateur radio operator designated to provide direction and control for the net participants.

REPEATER - A device which retransmits received signals in order to provide improved communications range and coverage.

SIMPLEX - A term used to describe the communication mode when both transmit and receive operations are conducted on a common frequency.

TRAFFIC - Used to describe messages passed through a net in amateur radio operation.

INFORMATION FOR AMATEURS - Supplement to NCARC Emergency Plan

A net control station will establish a directed net on a designated frequency. You should check in by giving your FCC-assigned call sign. Net control will instruct you to either standby, report to a staging area with specific equipment or report to a public official at a designated location.

If tactical call signs are utilized, use only your tactical call sign when:

1. reporting on station 2. you have emergency traffic 3. directed by net control

Tactical call signs will usually denote your function or location. You need only to conclude the exchange of transmissions with your FCC-assigned call to conform to FCC rules and regulations, e.g., "This is City Hall, K8SCI, out".

Think about what you need to say before keying the mike. Time can be critical. Talk like a telegram rather than like a long letter. Follow net control's instructions explicitly and promptly.

If you are directed to cover an official or agency, report directly to the person in charge, identify yourself, briefly explain the capabilities of the amateur net and answer any questions.

Ask if a roster of volunteers is available and if one is, sign it to ensure proper insurance coverage.

All traffic should be written and signed by the responsible official. Use message precedences as defined by the originator. If you become aware of an unrecognized need, notify net control. Under no circumstances pass informal queries or information. Never transmit your own observations or opinions unless asked by a competent authority or net control.

Never leave your post without authorization from net control. If released by the on-site official you may be needed elsewhere.

In the event of a repeater failure, use the repeater output frequency in the simplex mode, or the alternate frequency as designated by the net control operator.

This is one of a continuing series of technical research papers on the Theory of Dark, and related topics. If it appears to the casual observer that this, and proceeding text appears to be more like a "log" than a technical report, I commend the reader's power of observation, as that is exactly what the case report is supposed to be. Read on, and become enDARKened.

We have thus far expanded our collective minds with the current vogue of thinking, and, after having read and understood the classical Theory of Dark, have formulated our present and future thinking along these terms. At this point, it would be appropriate to reflect upon this Classical Theory of Dark, so that the neophyte can fully appreciate the total picture. Forthwith, then, is a reproduction of that paper.

DISSERTATION ON DARK

It has long been known that, according to the classical laws of physics, energy is directly proportional to the mass, and geometrically proportional to the speed of light. A. Einstein proposed: $E = Eo + M*(C**2)$ (1) where E is the relativistic energy, Eo is the "resting" energy, M is the equivalent mass of the energy packet in consideration, and C is the speed of light in total vacuo.

Intuitively, then, it should be obvious to all but the most casual observer that the speed of Dark must be greater than the speed of light, for it has been shown in countless demonstrations, both qualitatively and quantitatively, that Dark always preceeds light. This popular concept can easily be expressed, in terms of (1) by the relationship: $D = ((E-Eo)/M)**.5 B$ (2) where D is the speed of Dark, and B is the quasi-phasor velocity differential between light and dark.

Unfortunately, this theory is lacking in several very important aspects. First, the theory implies that, since $D > C$, then nights will eventually overshadow days, and ultimately there will be no daytime. Secondly, it has been considered that the quantity B is a constant, relative to C. Thirdly, the theory sadly presumes that, in general, the General Theory of Relativity is valid, which, in this author's opinion, is a gross oversight, for it clouds the real picture. Finally, and most important, the theory ignores completely the consequences of the existance of a phenomenon known by the enDARKened as "Black Lightning", and its associated physics.

It is the purpose of this paper, then, to provide a more rigorous definition of Dark by consideration of the following:

1) Examination of causal relationships to existant theory
2) Effectual relationships to observed or "known" data
3) Rigorous analysis of "B" in terms of existant theory
4) Resolution of errors in the Einsteinian equations, thus placing effectual relationships in exact accordance with the Great Sidereal Movement.

Several years ago, Collins et al proposed a startling and innovative theory concerning the speed of Dark, namely that the quantity B is not a constant, but actually a quaternay of tensorial degree N, where N is considered to be an invariant in all but "negligible" orders of Hilbert space. According to the Collins team, N has been shown to be: $N = sin(B) * sin(B) + cos(B) * cos(B) - E$
(3) where $E = exp(PI*i) * (1 - exp(nht))$ and $B > 0$, n is any positive integer > 1, h is Planck's constant, and t is the time, measured in Fortnights.

Simple substitution of the above into the generalized quaternay functional yields:
$B(x,y,z,t) = Q(N) + < C(t-T) * (D + PDQ) >$ (4)

When the convolution is evaluated for the required functionals of P, D, and Q, which can be found, incidentally, in most worthy texts (with associated extrapolations, mappings, and error functions), it will become immediately obvious that $B(x,y,z,t)$ is NOT a constant in the classical sense, but, in fact a functional in Z (the space of slowly increasing functions) which is ever so slowly decreasing in value such that it appears that dark never "catches up" with light, but merely supercedes it.

More recently, however, independent research from two teams have uncovered some cases in which minor discrepancies are noted when using the classical Collins equation. D. Ramser, while performing a series of experiments on chemical influence of the awareness process, showed the existance of a significantly non-trivial tensor in the 16th Quaternion of "Q". E. Benedict et al, while experimenting with his "inverted Kite" in an attempt to harness the anti-energy of Black Lightning, also disclosed Q(16) as well as several other tensors previously unfelt.....

Most theoreticians, including this misguided author, chose to ignore the so-called "startling revelation" and neglected the Ramser-Benedict equations in deference to existant theory. All efforts were directed to the expansion and refinement of the new Collins theory, with little or no regard to tensorials of any $(n) > 5$. This unfortunate attitude was similar to that adopted by the followers of A. Einstein, and we all know where that one led.

Recently, while consulting with Fox, Sunky, and Dawson, we discussed some notably unusual phenomena associated with the anti-electromagnetic properties of Black Lightning. Fox pointed out to me that perhaps my antiquated instrumentation was inadequate, and, in fact, that the existance of Q(16) and other tensorials play a very important part in the proof of the theory. Heretofore, I had totally discounted the quantitative effects as being simply experimental error.

Fortunately, I took his advice and resurrected my trusty old Turbo-encabulator (G.E. Co.,vis.1962). After a complete refurbishment and a recalibration to state-of-the-art levels, I set about to take a new data set of anti-gravimetric quantities. The results of these measurements show conclusively that the fundamental wavelength set for Black Lightning is precisely (and predictably) related to the existant crystal-lographic data for all known elements, and, by linear extrapolation, to all those elements yet to be discovered!! At last we have a true link between black and white. Some choose to call this concept "various shades of gray".

After a short conference with Collins et al we formed the "new concept" which sets down the following tenets:

First, the original Collins hypothesis is correct, but not for the reasons stated in the original work. The existance of Q(16) arises not from natural causes, as has been previously implied, but because of the inherent inadequacy of existant theory, to wit; the speed of light in a given medium is NOT a constant, but in fact, a non-linear variate of inverse proportion, not unlike the value of B(x,y,z,t) in the original Collins equation (4). This aspect will be dealt with rigorously in a forthcoming paper, as its acceptance should disturb the current physics community to no end.

Secondly, in light of the fact that the General Theory of Relativity and associated work appears to be in jeopardy as a result of these experiments, let me state categorically that this is NOT the case. In any situation where there is found a discrepancy between experimental and theoretical data, one may simply apply the Harmon-Collins equation, or correct for the discrepancy by considering that C differs from a constant by an amount inversely proportional to the magnitude of Q(16), whichever lends itself to easier manipulation of the data involved. This concept has been given the affectionate name: Harmon Fudge Factor (HFF).

Finally, this author is proposing that all theoretical difficulties imposed by the current limitations of conceptual understanding may be grossly simplified, if not completely laid to rest, by consideration of conformal 1:1 mapping into the imaginary plane, as opposed to the calculation of negative involved time, as is the current vogue.

We are convinced that these ideas will be of invaluable assistance in the resolution of the many unexplained physical phenomena that are "still on the books". Any and all rationale for the preceding concepts will be dealt with rigorously and supportive proof will be offered. Watch for our forthcoming "Treatise of the General Theory of Dark".

By: P. A. Harmon, O.L.D. (W1BKZ)

ARRL BULLETIN NR 110 FROM ARRL HEADQUARTERS

Newington CT December 24, 1985
To all radio amateurs

Radio amateurs communicating with their congressman alleging that a certain lobby is out to kill phone patches may be doing more harm than good. The bills in questn, HR 3378 and S 1667, have been named the Electronic Communications Privacy Act of 1985. The bills indeed require some attention from the amateur community, but they do not propose to outlaw phone patches. The measure cannot reach the House or the Senate for a vote before February or later, and ARRL has been working closely and personally with committee staff over the past few months to smooth out rough spots. Radio amateurs who wish to write to their representatives in congress are encouraged to first obtain a copy of the proposed legislation. Copies are available from ARRL Information Services, Newington, CT 06111. A large SASE with 73 cents postage would be appreciated. Details in January and February QST.

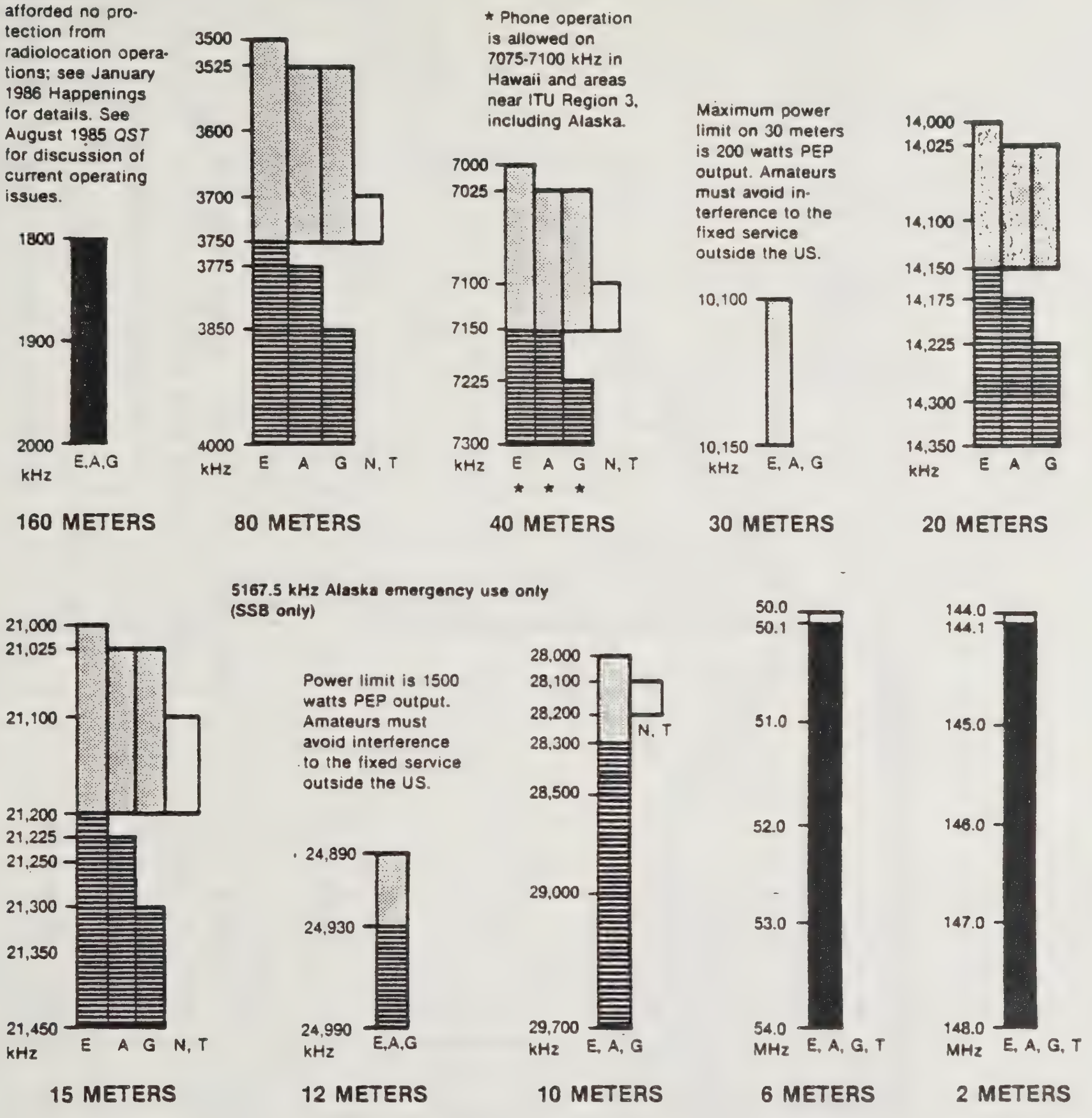
AMATEUR RADIO EXAMINATIONS First 6 Months of 1986

NCARC: February 22, 1986 in Maple Hts., Ohio. More information on back cover of this Communicator.
NOARS: February 2 NOARS WINTERFEST, March 23, April 20, May 25 and June 29 at 1000 Lowell, Elyria (EST BLDG 2 PM)

US Amateur Subband Allocations, 1.8 to 148 MHz

Power Limits: All US amateurs are limited to 200 watts PEP output in the Novice segments and in the 30-meter band. On all other segments, 1500 watts PEP output is permitted. In addition, there are ERP limitations for stations in repeater operation. (See 97.67, FCC rules.) At all times the power level should be kept down to that necessary to maintain communications.

Amateur stations operating at 1900-2000 kHz must not cause harmful interference to the radiolocation service and are afforded no protection from radiolocation operations; see January 1986 Happenings for details. See August 1985 *QST* for discussion of current operating issues.



* Phone operation is allowed on 7075-7100 kHz in Hawaii and areas near ITU Region 3, including Alaska.

Maximum power limit on 30 meters is 200 watts PEP output. Amateurs must avoid interference to the fixed service outside the US.

5167.5 kHz Alaska emergency use only (SSB only)

Power limit is 1500 watts PEP output. Amateurs must avoid interference to the fixed service outside the US.

KEY

☐ = CW ONLY
▩ = CW AND RTTY
▤ = CW, VOICE, SSTV AND FAX
■ = CW, VOICE, SSTV, FAX AND RTTY

E = EXTRA
A = ADVANCED
G = GENERAL

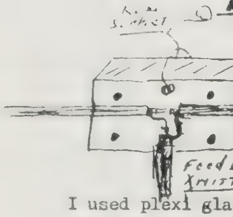
T = TECHNICIAN
N = NOVICE

Operators with Technician class licenses and above may operate on all amateur bands above 50 MHz. For more detailed information see *The FCC Rule Book*.

A COUPLE GOOD COAX ANTENNAS FOR BROAD BAND USEAGE

These antennas have been in use by WA8DYL since about 1963 or 1964 with SWR on 80M even today in 1985 with same feed line- being only about 1:3 to 1:0

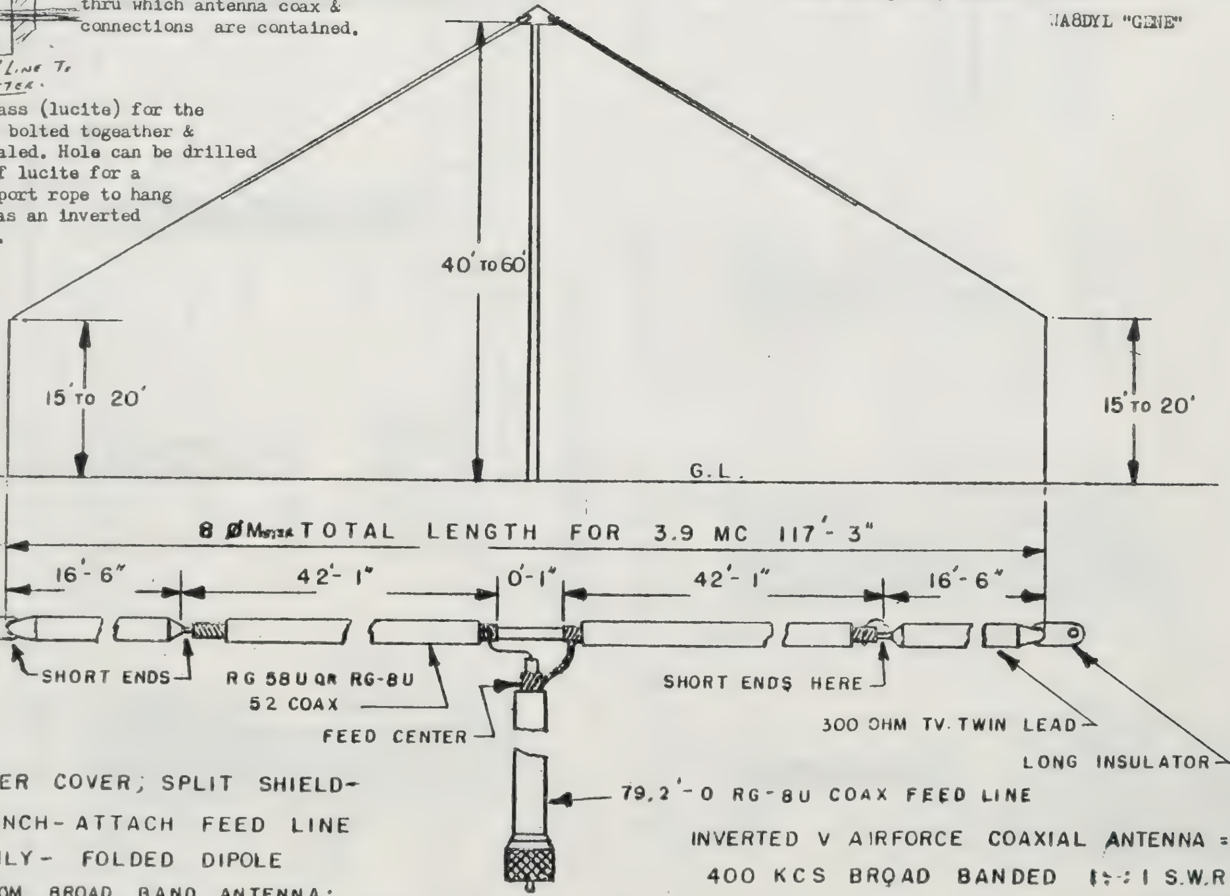
WA8DYL "GENE"



Drill lucite for cavities thru which antenna coax & connections are contained.

I used plexi glass (lucite) for the center support- bolted togeather & then weather sealed. Hole can be drilled at top center of lucite for a non metalic support rope to hang when supported as an inverted V configuration.

E.O.L



REMOVE RUBBER COVER; SPLIT SHIELD- SEPARATE 1 INCH- ATTACH FEED LINE TO SHIELD ONLY- FOLDED DIPOLE

INVERTED V AIRFORCE COAXIAL ANTENNA = 50Ω - 70Ω
400 KCS BROAD BANDED 1:1 S.W.R.

NOTES ON 40M BROAD BAND ANTENNA:
[redacted]- ANTENNA RG 58U COAX LENGTH 44'-9"
SHORT ENDS ATTACH 10'-5½" #12 WIRE TO EACH END MAKING A TOTAL LENGTH OF 65'- 7½"

Original
Credit W8DLP- Howard
Harbor Springs, Mich.

CONGRATULATIONS TO THE FOLLOWING NORTH COAST MEMBERS

- Jim Nestor, N8GJR who upgraded to Advance Class at the NOARS Exam on December 8, 1985.
- Ron Sauer, N8HBW who recently received his new call sign (x KA8VDB).
- Skip Hockensmith, N8HAD who recently received his new call sign (KA8DCD).

If you, or if you know of a club member who has upgraded, please let Rick (K8SCI) know at 779-8999 so it can be included in future Communicators, or drop a note to: NCARC, P O BOX 30529, Cleveland, OH 44130.

2 METER LSB VHF RBBS de Steve, WD8INO

The following information is provided regarding a new SSB MSO which Steve, WD8INO has put on the air.

FREQUENCY: 144.290 MHz (Lower Sideband) +/- 100 Hz, 110 Baud ASCII

This MSO is open to all avid VHFers in the Cleveland area. The Sole objective is devoted to the interest in the VHF/UHF and Microwave communications regions. The RTTY bulletin board is on 24 hours a day 7 days a week.

TO ACCESS MSO PLEASE READ THE FOLLOWING DIRECTIONS. NOTE: (C/R) means Carriage Return.

LIST COMMAND

```
SEND:  DE (YOUR CALL) A STRING OF RY's(C/R)WD8INO,L(C/R)
```

The computer will then list all filenames in the MSO's memory, and then sign off.

WRITE COMMAND

```
SEND:  DE (YOUR CALL) A STRING OF RY's(C/R)WD8INO,W,(FILENAME)(C/R)(MESSAGE);(C/R)
```

When the computer hears the semicolon (;) it will then store the filename in memory, let you know how many bytes remain and then send sign off message.

READ COMMAND

```
SEND:  DE (YOUR CALL) A STRING OF RY's(C/R)WD8INO,R,(FILENAME);(C/R)
```

When the computer hears the semicolon (;) it will search the memory for the filename: if found it will then transmit that file message and sign off. If not found, it will indicate such and sign off.

DELETE COMMAND

```
SEND:  DE (YOUR CALL) A STRING OF RY's(C/R)WD8INO,D,(FILENAME);(C/R)
```

When the computer hears the semicolon (;) it will then delete filename and it's message and reset the bytes remaining in storage counter. Then computer will transmit sign off message.

EXAMPLE FOR HELP

```
SEND:  DE (YOUR CALL) RYRYRYRYRYRYRYRY
       WD8INO,R,HELP;(C/R)
```

If all commands are followed as listed above, there should be no problem at all. Just remember to use commas and semicolons where needed. All information contained in this MSO is very informative and helpful in order to spark greater activity in the amateur VHF region.

Of interest to those on file are: VHF contest schedules, VHF nets and EME nets on the HF bands, Meteor showers for VHF use with optimum times for radio usage, construction interest (i.e. radio building, preamps, amps and antennas), club activities and up dates.

The list will continue to grow as more of us get involved in using this MSO.

NOTE: Present memory per message is 500 BYTES (1/2K). This should be expanded soon to 3K per message as soon as I can find the 16K RAM. Another addition will be to install a 144.290 MHz crystal in my rig to eliminate the drift problem we're currently having.

SUNSHINE

Our hearts go out to Ray Becker (KA8BPU) on the loss of his father (Raymond) who passed away on January 6, 1986 after a long illness.

We are pleased to report that Tim Hitesman's (KA8VIC) son Jason (10) is recovering fine after an emergency appendectomy on Jan 3, 1986 at Fairview General Hospital.

NORTH COAST MAP

Location 1. This location is where the North Coast Amateur Radio Club holds its meetings. It is also the location where the Hunters meet for the North Coast Fox Hunts. Cuyahoga County Public Library, 27425 Butternut Ridge Rd., North Olmsted, OH.

Location 2. Where the North Coast Amateur Radio Club's 145.290 MHZ repeater is located.

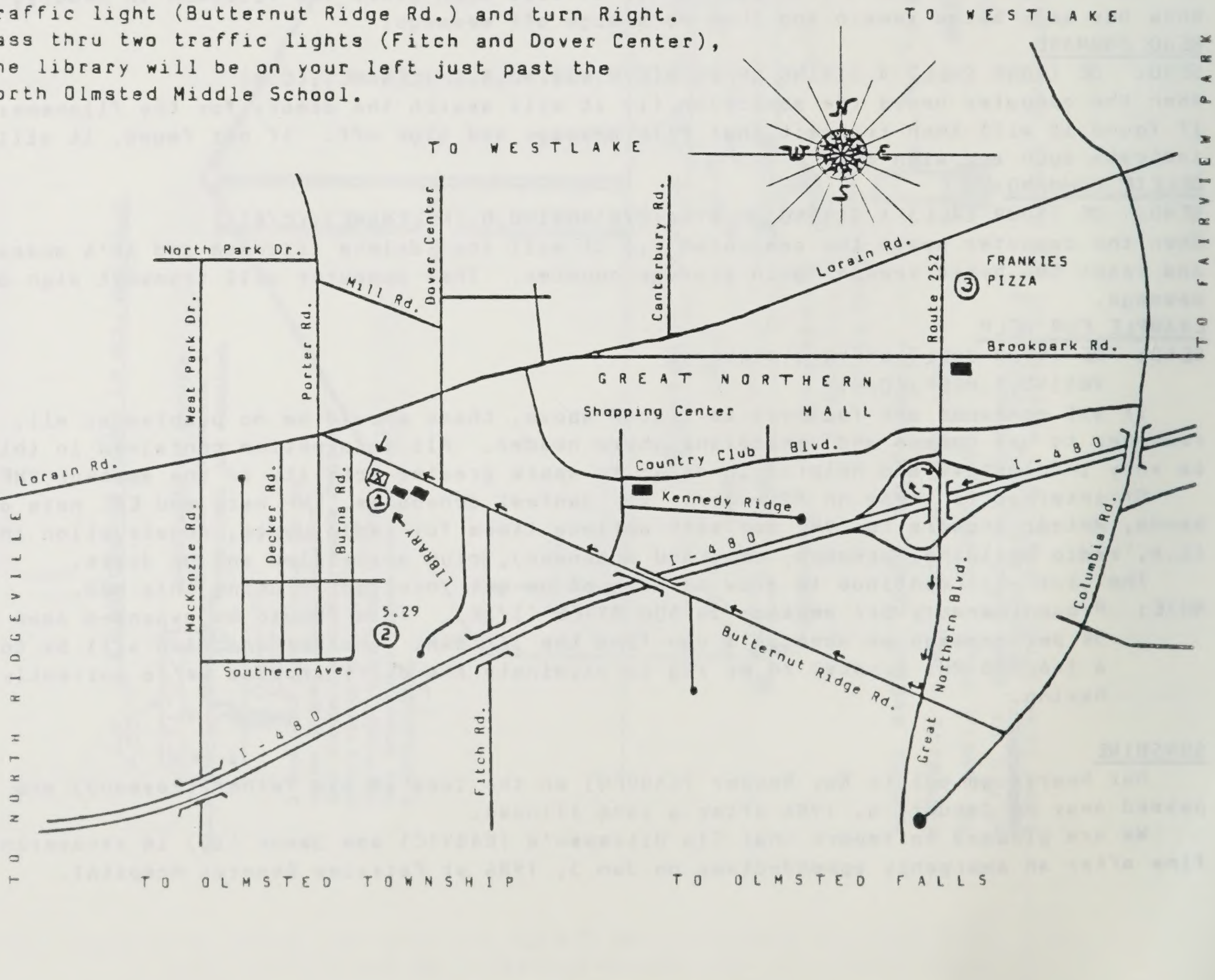
Location 3. This is where all of the participants in North Coast Fox Hunts go after the hunt is over. Here they exchange all the stories involved in trying to get to the fox, and have good times eating great pizza and stuff.

HOW TO GET TO THE MEETING FROM I-71

Take I-480 Westbound. If you are Southbound I-71 (from Cleveland), the exit after W.150th is Airport/I-480 Westbound (LEFT THREE LANES OF I-71). Once you are off of I-71, The right lane leads you to Westbound I-480.

If you are Northbound I-71 (from Strongsville), the exit after Snow Rd. serves both East and Westbound I-480 (RIGHT TWO LANES OF I-71). The left one of the two most right lanes leads you to West I-480.

You will go pass the Grayton, Clague, and Great Northern Exits. Immediately after the Great Northern Exit, get off at the ROUTE 252 SOUTH - OLMSTED FALLS exit. This will take you Southbound on Great Northern Blvd. Go to the first traffic light (Butternut Ridge Rd.) and turn Right. Pass thru two traffic lights (Fitch and Dover Center), the library will be on your left just past the North Olmsted Middle School.



JANUARY 12, 1986

NORTH COAST AMATEUR RADIO CLUB - MINI ROSTER

CALL	NAME	CALL	NAME	CALL	NAME
KB8-A	DAN	N8-FCX	RON	WD8-OYO	DAVE
WL7-AEC	TOM	N8-FDY	TOM	WD8-PBQ	JAY
N9-AGC	GREG	N8-FEG	PETE	KA8-PEF	JOE
WD8-AJF	DAN	N8-FGR	WAYNE	W8-PEV	JIM
KB8-AK	PAT	N8-FIL	RICH	K8-PPZ	TOM
N8-API	GEORGE	N8-FKS	DON	WD8-QAC	AL
K8-ATQ	ROL	N8-FKT	BOB	K8-QNK	DICK
N8-ATV	JERRY	KA8-FOE	PAULINE	KD8-QY	GEORGE
K8-AZ	TOM	WA8-FOV	TED	K8-RBV	BOB
W1-BBW	SHELLY	N8-FQQ	TOM	WB8-RGK	TIM
KA8-BJA	FRANK	N8-GJR	JIM	K8-RSH	CHUCK
W1-BKZ	PETE	W8-GNB	EDDIE	WD8-RZG	DON
N8-BO	CHARLIE	N8-GNJ	STEVE	K8-RZP	JOHN
WB8-BPA	DON	N8-GNK	NANCY	K8-SCI	RICK
KA8-BPU	RAY	N8-GNL	JOHN	WD8-SDP	LIN
N8-BTB	STEVE	N8-HAD	SKIP	KA8-SLX	CHRIS
K8-BVI	ART	N8-HBW	RON	WA8-SNI	CHARLIE
N8-BYW	BUD	W3-IGI	BILL	KA8-SNM	CHERI
N8-CAY	DIANE	KA8-IMU	TONY	K9-SSL	MIKE
W8-CEJ	MEL	WD8-INK	KEN	KA8-THY	EDNA
W8-CHA	STEVE	WD8-INO	STEVE	K8-TKQ	HOWARD
KB8-CI	TOM	W8-IO	BOB	KA8-TNE	PAUL
N8-CKV	PAUL	WD8-IQJ	JOHN	KA8-TQR	DENNIS
KA8-CKZ	BILL	WD8-IQO	MILT	KB8-TT	DAVE
KA8-CQY	MICHELLE	WD8-IRG	VAN	K8-TTZ	BOB
KA8-CYD	JENNIFER	WD8-ISB	DICK	KA8-TWK	KEN
K8-DBG	DICK	N6-JAM	RON	WB8-UDA	FRED
N8-DBL	TOM	WD8-JMM	AL	K8-UHX	J D
K8-DBN	BILL	KD8-JQ	DON	K8-UID	RON
K8-DDY	BILL	W8-KGA	LARRY	WB8-UPA	RUSS
N8-DMK	RUSS	WD8-KHU	MARK	K8-UTE	BASIL
K8-DTS	BOB	KC8-KI	JOHN	KA8-VDU	AL
WB8-DTY	TOMMIE	WD8-KTC	MARIE	KA8-VIC	TIM
WA8-DYL	GENE	KA8-LIH	KAREN	K8-VJG	RON
KB8-DZ	JOE	WD8-LRZ	LARRY	KA8-WAR	JOE
N8-DZO	JACK	AI8-M	DAVE	KA8-WCK	ROY
N8-EBA	RUSS	NO8-M	STEVE	KA8-WRZ	LARRY
W8-EFW	PAUL	K8-MDC	FRED	W8-WXR	ROGER
N8-EIJ	KEN	K8-MGH	LOU	W8-WYK	MAS
KD8-EQ	DICK	WD8-MHL	RAY	AE8-X	JIM
WA8-ERA	LEE	WD8-MHR	ERIC	AJ8-Y	DENNIS
W8-ETC	LEN	K8-MO	JEFF	AK8-Y	MIKE
N8-ETP	TOM	W8-MW	MAYNARD	KA8-Y	SHIRLEY
N8-ETQ	DAN	NO8-N	DIRK	KW9-Y	DON
N8-ETW	ERNIE	WB8-NAQ	BILL	KD8-YM	MIKE
N8-ETY	DAVE	WA8-NXT	FERD	WB8-YNX	CLYDE
N8-ETZ	MARY	WB8-NXT	NEIL	NB8-Z	LARRY
KA8-EVS	CHARLIE	WB8-OGN	JACK	KB8-ZA	JIM
KD8-EX	TOM	WD8-OMW	GLENN	KD8-ZK	ED
KC8-F	HEINZ	K8-OPV	GEORGE	WB8-ZQH	DAN
W8-FAZ	JOE				

FIRST CLASS MAIL

[redacted]

N C A R C
145.290
MHz

North Coast
Amateur Radio Club
P.O. Box 30529
Cleveland, Ohio 44130

AMATEUR EXAMINATIONS

On February 22, 1986 an Amateur Testing session will be conducted sponsored through the North Coast Amateur Radio Club. It will include all elements.

The examination will be given in Maple Heights, Ohio at 12:30 p.m. Fees, consisting of $4.25 along with 610 form should be mailed to:

Shirley Lantz, KA8Y
5641 Dunham Road
Maple Heights, Ohio 44137

NO LATER THAN JANUARY 25, 1986 FOR CONFIRMATION. If you have any questions, Please call Shirley at 662-4307. Walk-ins will be allowed.